

Amendments to the Claims

1. (Currently Amended) A method for controlling a dehydration speed of a washing machine with a drum driven by an induction motor having a number of poles and a voltage phase control circuit, comprising the steps of:

setting the a dehydration drum rotation speed on the basis of an amount of laundry put into the washing machine; and

establishing a range of the set dehydration drum rotation speeds including the set dehydration speed and at least one different dehydration speed;

changing a number of poles of the motor according to the established range of the set dehydration speed;

calculating performance evaluating motor torque-speed curves for multiple dehydration speeds in the established range; and

controlling a rotation speed of a the motor of the washing machine on the basis of the set dehydration speed for the amount of laundry in the washing machine by controlling the phase of the motor voltage phase control circuit in accordance with the performance evaluating torque-speed curves.

2. (Canceled)

3. (Original) The method of claim 1, wherein the motor is an induction motor.

4. (Original) The method of claim 1, wherein the washing machine is a drum washing machine.

5. (Currently Amended) The method of claim 1, wherein the step for changing the number of the poles of the motor changes the number of the poles in to 4 or 8 poles.

6-7. (Canceled)

8. (Currently Amended) The method of claim 1, wherein the ~~step for setting the dehydration speed on the basis of the sensed amount of the laundry converts the dehydration speed performance evaluating motor torque-speed curves are calculated on the basis of the a sensed amount of the laundry in the washing machine.~~

9-15. (Canceled)

16. (Currently Amended) The method of claim ~~14~~ 1, wherein the motor voltage phase control circuit has fire angles and the step for varying a dehydration speed through a phase control of the voltage of controlling the phase of the motor voltage phase control circuit in accordance with the performance evaluating torque-speed curves comprises the steps of:

sensing a fire angle corresponding to the dehydration speed; and

varying a voltage that is inputted to the induction motor according to the sensed fire angle.

17. (New) The method of claim 1, wherein the established range includes three drum rotation speeds.

18. (New) The method of claim 17, wherein the set speed is the lowest of the three drum rotation speeds.

19. (New) The method of claim 17, wherein the set speed is 400 RPM and the two other speeds in the established range are 600 RPM and 800 RPM.

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20. (New) The method of claim 17, wherein the set speed is 1000 RPM and the other two speeds in the established ranged of speeds are 1200 RPM and 1400 RPM.